UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 401 M Street, S.W. WASHINGTON, D.C. 20460

	DATA M	ATRIX			••••	
Date June 16, 2011			EPA Reg. No./File Symbol 83520-23		Page of 5	
Applicant's/Registrant's Name & Address Tacoma Ag, LLC P.O. Box 14073 Durham, NC 27713			Product Clethodim 37% MUP			
Ingredient Clethodim (CAS No	o. 99129-21-2)			• • • • • • • • • • • • • • • • • • • •		
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note ••	
830.1550	Product Identity and Composition	48227201	Tacoma Ag. LLC	OWN	See endnote	
830.1600	Description of Materials Used to Produce the Product	48227201	Tacoma Ag. LLC	OWN		
830.1620	Description of Production Process	48227201	Tacoma Ag. LLC	OWN		
830.1650	Description of Formulation Process	48227201	Tacoma Ag. LLC	OWN		
830.1670	Discussion of Formation of Impurities	48227201	Tacoma Ag. LLC	OWN		
830.1700	Preliminary Analysis	48227202	Tacoma Ag. LLC	OWN		
830.1750	Certified Limits	48227201	Tacoma Ag. LLC	OWN		
830.1800	Enforcement Analytical Method	48227201	Tacoma Ag. LLC	OWN		
		48227202	Tacoma Ag. LLC	OWN		
830.6302	Color	48227203	Tacoma Ag. LLC	OWN		
		48227204	Tacoma Ag. LLC	OWN		
830.6303	Physical State	48227203	Tacoma Ag. LLC	OWN		
		48227204	Tacoma Ag. LLC	OWN		
830.6304	Odor	48227203	Tacoma Ag. LLC	OWN		
		48227204	Tacoma Ag. LLC	OWN		
830.6313	Stability to Normal and Elevated Temperatures,	48227205	Tacoma Ag. LLC	OWN	Data	
	Metals, and Metal Ions	48227206	Tacoma Ag. LLC	OWN	Waiver ²	
11/			Name and Title		Date	
Signature Com M. Ville			Ann M. Tillman, Consulta	nt	June 16, 20	

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Applicant's/Registrant's Name & Address Tacoma Ag, LLC P.O. Box 14073 Durham, NC 27713		Product Clethodim 37% MUP				
Ingredient Clethodim (CAS No	. 99129-21-2)					
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note	
830.6314	Oxidation/Reduction: Chemical Incompatibility	48227204	Tacoma Ag. LLC	OWN		
830.6315	Flammability	48227204	Tacoma Ag. LLC	OWN		
830.6316	Explodability	48227206	Tacoma Ag. LLC	OWN	See endnote ³	
830.6317	Storage Stability	48227206	Tacoma Ag. LLC	OWN	PRN 92-5 ⁴	
830.6319	Miscibility	48227206	Tacoma Ag. LLC	OWN	Not required ⁵	
830.6320	Corrosion Characteristics	48227206	Tacoma Ag. LLC	OWN	See endnote ³	
830.6321	Dielectric Breakdown Voltage				Not required ⁶	
830.7000	pH	48227203	Tacoma Ag. LLC	OWN		
		48227204	Tacoma Ag. LLC	OWN		
830.7050	UV/Visible Absorption	Cite-all		PAY		
830.7100	Viscosity	48227204	Tacoma Ag. LLC	OWN		
830.7200	Melting Point/Melting Range				Not required ⁷	
830.7220	Boiling Point/Boiling Range	48227206	Tacoma Ag. LLC	OWN	Not required ⁸	
830.7300	Density/Relative Density/Bulk Density	48227203	Tacoma Ag. LLC	OWN		
		48227204	Tacoma Ag. LLC	OWN		
830.7370	Dissociation Constants in Water	48227206	Tacoma Ag. LLC	PL		
830.7520	Particle size, fiber length, diameter distribution	48227206	Tacoma Ag. LLC	OWN	Waiver ⁹	
11/			Name and Title		Date	
Signature Com M. Juller			Ann M. Tillman, Consulta	nt	June 16, 201	

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Ingredient Clethodim (CAS No					
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
830.7550	Partition Coefficient (n-octanol/water), Shake Flask Method	48227206	Tacoma Ag. LLC	PL	
830.7560	Partition Coefficient (n-octanol/water), Generator Column Method				See 830.7550
830.7570	Partition Coefficient (n-octanol/water), Estimation by Liquid Chromatography				See 830.7550
830.7840	Water Solubility: Column Elution Method; Shake Flask Method	48227206	Tacoma Ag. LLC	PL	
830.7860	Water Solubility, Generator Column Method				See 830.7840
830.7950	Vapor Pressure	48227206	Tacoma Ag. LLC	PL	
870.1100 (81-1)	Acute Oral Toxicity: Rat	Cite-All		PAY	
870.1200 (81-2)	Acute Dermal Toxicity: Rat	Cite-All		PAY	
870.1300 (81-3)	Acute Inhalation Toxicity: Rat	Cite-All		PAY	
870.2400 (81-4)	Primary Eye Irritation: Rabbit	Cite-All		PAY	
870.2500 (81-5)	Primary Dermal Irritation	Cite-All		PAY	
870.2600 (81-6)	Dermal Sensitization	Cite-All		PAY	
Signature am M. Tiller			Name and Title Ann M. Tillman, Consulta	int	Date June 16, 2011

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		Product Clethodim 37% MUP		IP	
Ingredient Clethodim (CAS No. 99129-21-2)					
Guideline Reference Number Guideline S	Study Name	MRID Number	Submitter	Status	Note
Clethodim Product Specific and Gener	ic Data Requirements				
Tacoma Ag, LLC is using the cite-all optic product specific and generic data requirer offers-to-pay to the following companies of List for clethodim.	ments. Tacoma Ag, LLC will make				
		Cite-All	Aceto Agricultural Chemicals Corp.	PAY	
		Cite-All	Helena Chemical Co.	PAY	
		Cite-All	Ritter Chemical, LLC	PAY	
		Cite-All	Agan Chem Mfg. Ltd.	PAY	
		Cite-All	Loveland Products, Inc.	PAY	
		Cite-All	Albaugh Inc.	PAY	
		Cite-All	BASF Sparks LLC	PAY	
		Cite-All	Valent U.S.A. Corp.	PAY	
		Cite-All	Makhteshim Agan of North America Inc.	PAY	
		Cite-All	Arystal Livescience North America LLC	PAY	
		Cite-All	Spray Drift Task Force	PAY	
110			Name and Title		Date
Signature am M. Tille			Ann M. Tillman, Consultant		June 16, 201

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ngredient Clethodim (CAS No	. 99129-21-2)				
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
		Cite-All	Outdoor Residential Exposure Task Force	PAY	
		Cite-All	Agricultural Reentry Task Force	PAY	
		Cite-All	Nisso BASF Agro Co. Ltd.	PAY	
		Cite-All	FIFRA Endangered Species Task Force LLC	PAY	
		Cite-All	Agricultural Handlers Exposure Task Force	PAY	
		Cite-All	J. Oliver Products, LLC	PAY	
		Cite-All	AmTide LLC	PAY	
		Cite-All	Generic Endangered Species Task Force	PAY	
		Cite-All	Willowood USA, LLC	PAY	
		Cite-All	Willowood Clethodim LLC	PAY	
		Name and Title		Date	
Signature and M. Jule	lu		Ann M. Tillman, Consultant		June 16, 201

Endnotes for Data Matrix for Clethodim 37% MUP

- ³ 830.6315 Explodability: Clethodim 37% MUP is not expected to be explosive since clethodim does not contain the functional groups associated with explosive chemicals. This waiver was accepted by EPA.
- ⁴ 830.6317, 830.6320 Storage Stability and Corrosion Characteristics Per PR Notice 92-5, storage stability and corrosion characteristics data are not required to be submitted unless specifically requested by the Agency. Tacoma Ag, LLC has initiated this study and the final report will be submitted upon completion of the study.
- ⁵ 830.6319 Miscibility: This data requirement is required when the product is an end use product and an emulsifiable liquid to be diluted with petroleum solvents. Clethodim 37% MUP is a liquid but it is not an end-use product to be diluted with petroleum solvents prior to application. In fact, Clethodim 37% MUP is used only to formulate end-use products. Therefore, Tacoma Ag, LLC requested a waiver from the requirement of this data requirement for Clethodim 37% MUP. This waiver was accepted by EPA.
- ⁶ 830.6321 Dielectric Breakdown Voltage: These data are not required for registration of an MUP and are not applicable to Clethodim 37% MUP.
- ⁷ 830.7200 Melting Point This guideline is not applicable to liquid products.
- 8 830.7220 Boiling Point These data are not required for MUP products. Literature data is cited for the TGAL
- ⁹ 830.7520 Particle size, fiber length, diameter distribution Tacoma Ag, LLC requested a waiver for this data requirement for Clethodim 37% MUP because the product is not water insoluble and it is not a fibrous material. This waiver was accepted by EPA.

¹ The original application for registration was submitted by AXSS USA LLC but the company name changed to Tacoma Ag, LLC. The product name changed from AX106C MUP to Clethodim 37% MUP.

^{830.6313 –} Stability to Metal and Metal lons - Tacoma Ag, LLC requested a waiver from the requirement for stability data for Clethodim 37% MUP in the presence of metal and metal ions since Clethodim 37% MUP will not be stored or packaged in containers made of metal or metal ions. Tacoma Ag, LLC requested a waiver from the requirement for stability data—both to normal and elevated temperatures and to metal and metal ions--for Clethodim TGAl due to the known instability of clethodim and to the fact that Clethodim TGAl will not be stored for long periods of time but converted to Clethodim 37% MUP as soon as it is produced. These waivers were accepted by EPA.